

APPENDIX A: WALLA WALLA DISTRICT SPILL ACTION PLAN

Walla Walla District
Army Corps of Engineers

Spill Action Plan

Walla Walla District– All Projects

April 2007



SPILL ACTION PLAN RESPONDER GUIDELINES

At the Scene of a Spill - Take These Actions!

- 1. Assess the spill situation. Does it threaten the environment, human health, or both? If so, withdraw to a safe distance (use MSDS & DOT Guide); notify control room & close area to all personnel.**
- 2. If workers are injured or exposed to chemicals, call the control room to activate the EMS system. Provide first aid if safe to do so. Otherwise, stay upwind & do not become exposed!**
- 3. Establish Incident Command. At a minimum, establish an Incident Commander & Safety Officer. Determine strategic goals (what to do) & tactical objectives (who & how).**
- 4. Activate the Notification System (Annex 1). Keep management informed!**
- 5. Fill out Forms ICS 201 and 202 (Annex 2). Use these forms as both an Initial Report and as an Incident Action Plan.**
- 6. Conduct a safety briefing before any Responder's are tasked to respond. Use Annex 3, "Spill Emergency - Activity Hazard Analysis" as a guide.**
- 7. For oil spills (without contaminants) deploy absorbents and containment equipment to the extent possible. Use standard project safety practices.**
- 8. For all other spills, establish site security and Incident Command but do not approach the spill or attempt to contain. Activate Fire Service and/or Spill Contractor response.**
- 9. Continually reassess the situation. Exchange Incident Command functions (Incident Commander, Safety Officer, Operations, etc.) as appropriate. Use Interagency Resources!**
- 10. Maintain focus on safety & health, environment and property, in that order until the Spill is Under Control. Coordinate post-spill cleanup actions with the Project ECC.**

**SPILL RESPONDER PRIORITIES: (1)PEOPLE (2)ENVIRONMENT
(3)PROPERTY!**

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6 1. INTRODUCTION

This Spill Action Plan was developed to provide employees with procedures for taking actions during an oil or hazardous substance spill. Employees who respond to spills shall only work under procedures outlined in the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (HAZCOM). Corps employees shall only take actions for those spills that meet the definition of an “incidental spill” and follow procedures covered under each operational project’s “hazards of non-routine tasks” section outlined in the Hazard Communication Plans (29 CFR 1910.1200). Any spill must be first assessed to determine whether it is incidental or an emergency. An incidental spill is defined as follows:

Responses to incidental releases of hazardous substances where the substance can be absorbed, neutralized, or otherwise controlled at the time of release by employees in the immediate release area, or by maintenance personnel are not considered to be emergency responses within the scope of this standard. Responses to releases of hazardous substances where there is no potential safety or health hazard (i.e., fire, explosion, or chemical exposure) are not considered to be emergency responses.

Such responses can be cleaned up under the Hazard Communication Standard.

In the event of a spill emergency, employees shall not take defensive actions. Such an emergency may require support from outside agencies (spill contractor, HAZMAT Groups, Local Fire Departments, etc.). The definition of a spill emergency as identified by the Hazardous Waste Operations and Emergency Response Standard is found in 29 CFR 1910.120:

Emergency response or responding to emergencies means a response effort by employees from outside the immediate released area or by other designated responders (i.e. mutual aide groups, local fire departments, etc.) to an occurrence which results, or is likely to result, in an uncontrolled release of a hazardous substance.

7 2. SCOPE

This Spill Action Plan, hereafter referred to as the “Plan,” provides an orderly procedure for safe and effective response to oil or hazardous substance spill emergencies. The Plan provides a single consolidated document to meet multiple spill response planning requirements as identified under OSHA’s Hazard Communications Standard, RCRA’s Contingency Plan, SARA Title III’s Emergency Planning and Community Right To Know Act, the Oil Pollution Act, the Clean Water Act, and the State, Area, Regional, and National Contingency Plans (NCP) for spill response. Implementation of the NCP requires a nationwide network of regional response plans. This Plan is a part of that nationwide network. Operations Managers, Incident Commanders, and Responders shall use this plan as their primary guidance for responding to oil and hazardous substance spills in the Walla Walla District.

This plan includes a discussion of regulatory agency and Walla Walla District responsibilities followed by discovery and notification procedures, incidental spill response, emergency spill response, safety and health, pollutant disposal, spill response contracting, reporting, public

information, training and exercise requirements, and the distribution of the document. “Special Cases” of hazardous substance emergencies and response are also identified. These include floating drums, illegal dumping, spills onto leased/out granted property, and spills at construction sites on or off Corps property. Additional annexes provide project-specific information in support of the text.

8 3. STATE & FEDERAL REFERENCES

AR 200-1, U.S. Army, Environmental Protection and Enhancement, Chapter 3, “Oil and Hazardous Spills”, (February 1997).
Clean Air Act, Section 112 [r], (1990).
Clean Water Act, Spill Prevention, Control, and Countermeasures (SPCC), 40 CFR Part 112, (1972).
Comprehensive Environmental Response Compensation and Liability Act (CERCLA), 40 CFR Parts 300; 302; 355; and 373, (1980).
DA PAM 200-1, US Army, Environmental Protection and Enhancement, Chapter 3, “Oil and Hazardous Spills”, (January 2002).
EM 385-1-1, U.S. Army Corps of Engineers, Safety and Health Requirements Manual, (September 2003).
Emergency Planning and Community Right-to-Know Act (EPCRA), 40 CFR Part 355, (1990).
ER 200-2-3, U.S. Army Corps of Engineers, Environmental Compliance Policies, (30 October 1996).
Executive Order 12856, Federal Compliance With Right To Know Laws and Pollution Prevention Requirements, (August 1993).
Geographic Response Plan, Washington Department of Ecology, (December 1997).
National Oil and Hazardous Substance Pollution Contingency Plan, 40 CFR Part 300, (1980).
Hazardous Materials Transportation Act of 1979, 49 CFR Parts 170-178, (amended 1990).
Northwest Area Contingency Plan (NWACP), EPA Region 10, (July 1998).
Oil Pollution Act of 1990, 40 CFR Part 112; 33 CFR Parts 135,137, 150; 49 CFR Part 106; & 15 CFR Part 900 (1990).
Oregon Administrative Rules, Division 47, Regulations Pertaining to Oil Spills Into Public Waters; and Division 108 Regulations, Oil and Hazardous Materials Releases (2001).
OSHA’s Emergency Action Plan, 29 CFR 1910.38a (2000).
OSHA’s Hazard Communication Standard, 29 CFR 1910.1200 (amended 1994).
OSHA’s Process Safety Standard, Management of Highly Hazardous Chemicals, 29 CFR 1910.119 (1992).
Resource Conservation and Recovery Act (RCRA), 40 CFR Parts 260-266, (July 1986).
Toxic Substance Control Act (TSCA), 40 CFR Part 761, (1976).
Superfund Amendments and Reauthorization Act (SARA) , 40 CFR [see CERCLA], (1986).
Washington Administrative Code, Chapter 173-180D, Facility Oil Spill Prevention Standards (1992).

9 4. REGULATORY AGENCY RESPONSIBILITIES

Primary responsibility for the management of oil and hazardous substance spills in inland waters is assigned to the Environmental Protection Agency (EPA) Region 10 office in Seattle,

Washington. The U.S. Coast Guard's Portland, Oregon office has responsibility for the management of spills in coastal waters up to Bonneville Lock and Dam on the Columbia River. Both agencies have designated Federal On-Scene Coordinators (FOSC's) who have the responsibility of coordinating spill responses outside the capability of local resources. The EPA and USCG decide whether the spill is major or minor, whether the "spiller" is being responsive, and if necessary call in outside contractors.

Both agencies make use of designated "On-Scene Coordinators" (OSC's) from either the Oregon Department of Environmental Quality (DEQ) or the Washington State Department of Ecology (DOE). Corps Operations Managers, Incident Commanders and Responders shall recognize the authority of FOSC's and OSC's and, where appropriate, incorporate them into a single "Unified Command" structure. If Tribes are impacted or have the potential of being impacted, they have a right to be included under the Unified Command Structure.

10 5. WALLA WALLA DISTRICT RESPONSIBILITIES

Walla Walla District responsibilities for spill response are dependent upon whether the spill occurs on Corps property or non-Corps property. Each of these cases is discussed and the responsibilities of key staff are defined.

a. Spills On Corps Property. For non-construction related spills occurring on and limited to Corps property the Operations Manager, Incident Commander, or Lead Responder shall have the responsibility and authority to coordinate response and recovery actions. Their primary mission is to ensure that proper site control, spill containment, and cleanup is achieved while protecting the health and safety of all personnel involved in the response. If the spill occurs on Corps property and has the potential to impact non-Corps property, the Operations Manager, Incident Commander or Lead Responder may be required to expand the unified command system to include the FOSC (EPA or USCG) and/or OSC. At all times the Corps shall retain control of Corps resources and personnel involved in the response.

b. Spills Off Corps Property with Potential to Impact Corps Property. For spills occurring off Corps property with the potential to impact Corps property, the Operations Manager, Incident Commander, or Lead Responder shall initiate defensive actions. This generally involves using Corps resources on Corps property and supporting the EPA or USCG FOSC and/or the OSC response to the extent possible. Spill response to non-Corps spills on non-Corps property is only authorized when the spill represents a threat to Corps facilities. In accordance with ER 200-2-3, authorization by the Commander is required for off-site actions. Corps forces will be withdrawn as soon as alternate response units arrive (as identified in the Northwest Area Contingency Plan) and the situation has stabilized.

c. Spills by organizations under Resident Office purview. For spills occurring on or off Corps property by organizations under construction contracts to USACE with the potential to impact health or the environment, the Resident Engineer, Incident Commander or Lead Responder shall insure that the Contractor initiates actions per approved plan. This generally involves insuring that the contractor is taking proper action and that the Contractor is coordinating with the Resident Engineer, EPA or USCG FOSC and/or the OSC response to the

extent possible. Spill response by Corps employees, on or off Corps property, shall be advisory to the Contractor for insuring the Corps interest. Corps of Engineers personnel direct response is only authorized when the spill represents a threat that is not being properly responded to by the Contractor. In accordance with ER 200-2-3, authorization by the Commander is required for off-site actions. Corps forces will be withdrawn as soon as alternate response units arrive and the situation has stabilized.

11 6. DISCOVERY AND NOTIFICATION

When an oil or hazardous substance spill is discovered within the Walla Walla District the notification process must begin immediately. At the time of notification, the discovering party should determine if the spill is “incidental” or an “emergency.” In many cases this distinction will be obvious. To make the proper distinction between an incidental spill and an emergency spill it is necessary to look at two factors: health & safety and the environment.

Accidental spills of hazardous substances are covered by one of two health and safety programs. These programs are: (1) The Hazard Communication Standard, 29 CFR 1910.1200, which covers the worker response to “*incidental spills*,” and; (2) The HAZWOPER Standard, 29 CFR 1910.120 (q) which covers worker response to “*spill emergencies*.” Accidental spills of hazardous substances also are covered by one of two environmental programs. These are “non-reportable quantity spills” and “reportable quantity spills.” For purposes of this plan, non-reportable quantity spills are generally considered to be *incidental spills* and reportable quantity spills are generally considered to be *emergency spills*. When it is difficult to determine whether a spill is incidental or emergency, Incident Commanders will make the final determination.

When an *incidental spill* occurs on Corps property the responder shall verify that the spill falls within incidental spill guidelines. In most cases the site supervisor will direct the response and cleanup (see section 7, “Incidental Spill Response”).

When a *spill emergency* occurs on or in the vicinity of the project the responder becomes responsible for contacting the control room. Following notification the Operations Manager, Project Incident Commander or Lead Responder will perform site assessment, containment, and control actions to the extent possible. The following sections of this plan provide a more detailed description of the characteristics, examples, and appropriate response actions for both incidental spills and spill emergencies.

12 7. INCIDENTAL SPILL RESPONSE

An “Incidental Spill Response” occurs when a small quantity of oil or a hazardous substance is spilled and the substance can be absorbed, neutralized or otherwise controlled at the time of the release by employees in the immediate release area or by other maintenance personnel. Responses to releases of hazardous substances where there is no potential safety or health hazard (i.e. fire, explosion, or chemical exposure) are not emergencies and may be handled under the Hazard Communication Standard. However, incidental spills may still be considered reportable quantity spills requiring additional notifications to federal and state authorities.

a. Incidental Spill Characteristics. To help Operations Managers, Incident Commanders and Responders understand what is considered an “Incidental Spill”, the following guidelines are provided.

b. Incidental Spill Examples. Examples of “Incidental Spills” which are cleaned up under the Hazard Communication Standard are:

- A leaking valve has filled a transformer containment structure at a powerhouse with approximately 50 gallons of hydraulic oil. None of this oil has escaped or contaminated water. The maintenance foreman shuts down the valve and cleans up the spilled oil under the Hazard Communication Standard.
- An air compressor valve fails and releases 25 gallons of oil. The oil enters the river forming a sheen. The spill is reported to the control room and maintenance personnel safely clean up the oil around the compressor. Although a reportable quantity spill, this release may be cleaned up under the hazard communication standard.
- A summer paint crew unloading paint for use in a campground drops a 45-gallon container onto the pavement. All of the paint was spilled. It is a hot day and the paint begins to dry. The crew leader directs his workers to scrape the paint off the pavement for disposal

c. Incidental Spill Response Actions. *For incidental spills the following actions shall be taken:*

1. The supervisor in charge of the work area shall determine whether the spill is incidental or a spill emergency. The Project ECC should always be notified regardless of the type of spill.
2. The supervisor in charge of the work area shall direct the incidental spill cleanup using personal protective equipment specified on the MSDS for the product. The spill area shall be closed off to prevent unauthorized entry and exposure. No further actions are required.
3. In the event the spill is a reportable quantity, the control room shall be immediately notified and proper notification shall be made (Annex 1).

13 8. EMERGENCY SPILL RESPONSE

For purposes of this Plan, a “Spill Emergency “occurs when;

Emergency response or ***responding to emergencies*** means a response effort by employees from outside the immediate release area or by other designated responders (i.e., mutual aid groups, local fire departments, etc.) to an occurrence which results, or is likely to result, in an uncontrolled release of a hazardous substance (29 CFR 1910.120).

Responses to discharges of oil or releases of hazardous substances where there is a potential safety or health hazard (i.e. fire, explosion, or chemical exposure) are emergencies and shall be handled using emergency procedures identified in this Spill Plan.

a. Emergency Spill Response Characteristics.

Actions to spills additionally fall under Environmental Protection Agency (EPA) standards. The EPA has also defined Emergency “Spill Events” for Oil and Hazardous Substances under the “National Contingency Plan”, or NCP. The NCP defines an “Oil Spill Event” as “....discharges of oil into or upon the navigable waters of the United States or adjoining shorelines in such quantities that it has been determined may be harmful to the public health or welfare of the United States...”

The NCP defines a “Hazardous Substance Spill Event” as “....a ‘reportable quantity’ of a hazardous substance released into the navigable waters of the United States within a 24-hour period.” “Reportable Quantities of Hazardous Substances” were previously defined in Section 3, “Key Terms.” Since as little as one pound of a hazardous substance released into a water body could result in a reportable quantity release all responders shall assume that any chemical release to a water body requires an emergency response until proven otherwise. For releases of oil, a reportable quantity spill is any non-permitted discharge of oil which creates a visible sheen of oil on a waterway or a quantity of 42 gallons or greater on land.

Hazardous materials spills that violate water quality standards are often difficult to detect and may not offer effective recovery options. At a minimum, prompt reporting and damage assessment shall be performed, along with product recovery if possible. To help Operations Managers, the Resident Engineer, Incident Commanders and Responders better understand what is considered a “spill emergency”, the following guidelines are provided. A “*Spill Emergency*” is a spill that:

- Is a known or unknown substance that presents a health or safety hazard to the employee(s) performing the cleanup, or
- Is a “reportable quantity” oil discharge or hazardous substance release, or
- Has contaminated or has the potential to contaminate soil or water, or*
- Cannot be safely cleaned up by employees in the immediate release area without outside assistance

* See section 7, “Incidental Spill Response” for incidental responses to oil spills.

b. Examples of Emergency Spill Response. Examples of spill emergencies which must be responded to under this Spill Response Plan include:

- An unpleasant odor in a 20-yard dumpster is reported by the camp host at a Corps campground. Two Responders approach the dumpster from upwind and observe uncommon chemical products on the ground. They determine the product to be an “unknown.” They leave the area and establish site control. They report the situation to the Control Room and secure the scene with danger tape. No one is allowed entry until HAZWOPER-trained personnel assess the situation and take appropriate action.

- A semi-trailer truck has been involved in an accident next to a popular Corps lake. Both diesel tanks have ruptured and the fuel has saturated gravel for about 100 feet. Rain is in the forecast. Corps Rangers secure the scene and deploy containment boom along the shore. They contact the trucking company representative and request that the spill be cleaned up immediately by HAZWOPER-trained personnel.
- Streams of oil are observed flowing out of a gate-well and into the tailrace at a Corps Dam. After careful research, the oil is determined to be from a hydraulic apparatus that contains 500 gallons of oil. It appears most of the oil has leaked out.

c. Emergency Spill Response Actions.

1. If there is an imminent or actual spill emergency the Operations Manager, Project Incident Commander or Lead Responder will immediately determine if the spill is “On-Project” or “Off-Project.”

2. Follow the Spill Action Plan Responder Guidelines at the front of this Plan.

14 9. OTHER PROCEDURES

a. Funding. Funds will be provided for charges related to response and cleanup of Corps spills from the responsible project. Reimbursement for charges related to non-Corps spills will be sought from the responsible party.

b. Local Agencies or Contractor Response. Containment, control and cleanup of spill emergencies usually requires outside assistance. Resources may include Hazmat Fire Service Teams and/or Corps Spill Response Contractors. Each of these teams comes with their own internal structure and leadership. All responders shall report to the designated Incident Commander. For hazardous substance spills, Hazmat Fire Service teams and/or Corps Spill Response Contractors shall be the primary responders. A list of Corps Emergency Spill Response Contractors is provided in Annex 4.

c. Safety and Spill Response Equipment. Standard safety equipment on the project includes hard hats, protective wet gear, rubber boots, life vests and insulated gloves. During night-time operations personal headlamps and auxiliary lighting is required to provide additional worker safety. Project Responders dispatched to investigate a spill should carry binoculars; current copy of the Plan; field book; DOT guidebook; radio; and cellular phone. If a camera is available photographs should be taken from a safe upwind location showing the source and the extent of the polluting spill.

Spill response equipment varies by project. At a minimum, pre-positioned oil absorbent, pads and booms should be strategically located throughout each project. Response equipment should be provided to enable containment or control of the worst possible spill event occurring at the project. Annex 5, “Spill Response Equipment by Location,” provides a summary of available resources.

d. Evacuation and Site Control. The Operations Manager, Incident Commander or Lead Responder has the responsibility to determine evacuation and site control requirements. In the interim period before the Operations Manager or Incident Commander arrives, the initial or Lead Responder shall establish site control. If the substance involved in the spill poses a direct threat to health and safety an evacuation of the area may be initiated. Under these unusual conditions the best method for evacuating areas may be through the use of project staff and/or local law enforcement and fire service resources. If off-project evacuation of citizens is necessary, it shall be performed by and with the concurrence of local authorities. Evacuation of Corps-owned property is within the authority of the Operations Manager or designated representative and may be accomplished using whatever resources are available at the time.

For building or facility evacuation, follow procedures outlined in the Operational Project Emergency Action Plan 29 CFR 1910.38(a).

e. Special Cases. There are a number of spill scenarios that occur at Corps projects that require special consideration. These include Floating Drums; Illegal Dumping; Spills on Leased/Outgrant Property; and Spills at Construction sites by Corps and Non-Corps Contractors. Each case is briefly discussed.

(1) Floating Drums. On a periodic basis floating drums may appear in waters of the State impounded by Corps dams. District policy on these containers is to notify the Oregon DEQ or the Washington DOE and to support their respective recovery mission to the extent possible. In the event that the respective state agency chooses to not remove the drums, the Operations Manager shall decide, on a case by case basis, whether or not the container poses a threat to the authorized project functions and to order its removal. If the Operations Manager does order the removal the operation shall be considered a potential Spill Emergency and performed under the strict safety protocols of the HAZWOPER standard. Responders may remotely recover drums, but close or direct contact is limited to 40-hour trained HAZWOPER teams. All rogue drums removed by the Corps shall be turned over to the Oregon DEQ or the Washington DOE for disposal.

(2) Illegal Dumping. Hazardous materials are periodically disposed of on public property. When this occurs, an emergency response or expedited cleanup may be required. Given that illegally discarded materials have unknown contaminants, only professional HAZWOPER – trained teams will be used to perform these cleanups. Increases in drug lab disposals, with extremely hazardous components further emphasize the need for a professional response. The WDOE will be called in to clean-up any discovered methamphetamine labs.

(3) Spills Onto Leased/Outgrant Property. Lessees and Outgrantees are responsible for compliance with the same spill prevention and response laws as Corps-managed property and shall be held accountable to these laws. The “spiller” on any leased or outgranted property shall be responsible for removing the spilled material and restoring the site to its original condition. Full compliance with the HAZWOPER standard and all state and federal cleanup standards is required of the spiller. Should a lessee/outgrantee be non-responsive to a spill emergency they have caused or is subject to their control, the Corps shall respond to the spill and seek cost reimbursement from the lessee/outgrantee. Should a spill event occur outside the span of control

of the lessee/outgrantee and the responsible party does not take appropriate cleanup actions, the Corps shall respond to the spill and seek cost reimbursement from the responsible party.

(4) Spills at Construction Projects – Corps Property. If a Construction Contractor creates a spill emergency on Corps property he/she shall immediately secure the scene and implement their (Contractor's) spill response plan. The Construction Branch personnel responsible for the contract shall ensure this action takes place effectively and immediately. In the event that the Contractor has no plan the contractor shall use the Corps plan. Construction Branch will insure that the Contractor's plan provides a level of protection equal to the Corps plan and complies with State and Federal health, safety and environmental protection requirements. The Contractor shall coordinate with the designated Construction personnel, or in their absence, the designated Incident Commander to ensure that the spill response is safely conducted and the site restored to its original condition.

(5) Spills at Construction Projects – Non-Corps Property. If a Contractor creates a spill emergency on non-Corps property, the Contractor shall immediately secure the scene and implement their (Contractor's) spill response plan. The Construction Branch personnel responsible for the contract shall ensure this action takes place effectively and immediately. In the event that the Contractor has no plan the Contractor shall use the Corps plan. This plan may be supplemented by utilization of spill response contractors. Priorities of people, environment and property shall remain unchanged regardless of which plan is being followed.

(6) Acts of Terrorism. Some Corps projects are known to be potential terrorist targets. In the event of a terrorist attack, immediately contact the Walla Walla District Security Office and the National Response Center. Follow procedures outlined in the Spill Action Plan Responder Guidelines at the front of this Plan.

The goal of this plan is to ensure that response personnel are trained to distinguish terrorist spill events from accidental spill events and to react appropriately. This is best achieved by Incident Command and Responder training and refreshers. The DOT Emergency Response Guidebook contains a special section titled, "Criminal/Terrorist Use of Chemical/Biological Agents." Each Responder and Incident Commander shall become familiar with this section and follow the recommended procedures.

15 10. SAFETY AND HEALTH

During emergency spill response operations, careful attention to safety and health is required. If Responders are to be used for containment, control or limited cleanup activities a Safety Officer shall be designated. If a Safety Officer is not designated this duty shall become the responsibility of the Incident Commander. This individual shall assess safety and health requirements for Responders prior to work being performed and determine effective countermeasures to control all known hazards. In addition, the Safety Officer shall prepare a written Activity Hazard Analysis. A suggested Activity Hazard Analysis is provided in Annex 3.

16 11. WILDLIFE RESCUE AND REHABILITATION

Discharges of oil and releases of hazardous substances to waterways present extreme risks to waterfowl and other aquatic wildlife. A well-coordinated plan for the rescue and rehabilitation of wildlife is necessary to minimize losses. This Spill Plan directs all Incident Commanders to make every reasonable attempt to recover impacted wildlife and provide for their rehabilitation. To perform this function in the most effective manner, a Wildlife Branch shall be established within the Operations Section of the Incident Command/Unified Command structure. The Wildlife Branch duties are described in the NWACP and shall include:

- Conducting wildlife rescue/rehabilitation operations
- Conducting aerial and ground reconnaissance for dead/injured wildlife
- Transportation of dead/injured wildlife
- Establishing treatment and rehabilitation facilities
- Implementing volunteer training/management plans
- Release of rehabilitated wildlife
- Disposal of dead wildlife
- Maintaining evidence and records
- Coordinating with other related units.

The Wildlife Rescue and Rehabilitation Branch should be divided into “Rescue” and “Rehabilitation” for large events. Use of state and federal Fish and Wildlife agencies, spill response contractors and private wildlife care organizations is encouraged. Prior coordination with these organizations is essential. Since this function represents unique safety and health challenges, only professional employees and trained volunteers shall be utilized. The Wildlife Rescue and Rehabilitation Branch Chief shall be directly responsible for ensuring that every employee in this branch is provided a safety briefing and appropriate protective equipment prior to work. Although every effort shall be made to support wildlife rescue and recovery, no responder shall be put at risk to carry out this mission.

17 12. SPILL RESPONSE CONTRACTING PROCEDURES

Immediate Contractor assistance is often required to achieve successful containment, control and cleanup of hazardous substances or oil during spill emergencies. For smaller events, operating projects may use local spending authority to obtain contractor assistance. For larger spill events the following sequence of operations shall be utilized:

- a. **Contact a Corps Contracting Officer.** Contact one of the Walla Walla District's Authorized Contracting Officer(s). These individuals are identified on the District's Emergency Contract Roster (card), including after-hours telephone numbers.
- b. **Request a Qualified Spill Response Contractor.** Qualified contractors exist in the Portland and Walla Walla District's that are capable of providing emergency spill response services and are listed in Annex 4. These contractors maintain full-time HAZWOPER trained employees who can perform a 4-person Level B (SCBA) hazardous substance emergency spill response. They also own/operate spill response equipment, oil-skimming vessels, vacuum trucks, salvage equipment, containment booms, etc. The requesting Incident Commander should make a rapid determination of what spill response company is most

appropriate to respond to the particular emergency. Due to the extreme hazards associated with emergency spill response only qualified contractors shall be considered. The USCG and USEPA also maintain an active list of qualified contractors who may be utilized as appropriate.

- c. **Provide the Contractor with Authorization to Proceed.** A Corps Contracting Officer shall be the approval authority for the response contractor. All contracts should include a “*not-to-exceed cost limitation.*” On the next business day following the spill event, a requisition for services shall be prepared including an urgent and compelling justification; funds verification; and fund site.
- d. **Execute Spill Response Operations and Cleanup.** The Incident Commander shall serve as the Contracting Officer’s Representative and in this capacity review and approve or disapprove contractor actions prior to their execution. For large events, the Incident Commander shall establish a Finance Officer and track expenditures of all parties.
- e. **Terminate Contractor Services.** When emergency conditions no longer exist, the Incident Commander shall terminate the contract and transition to non-emergency operations.

18 13. DISPOSAL OF POLLUTANT

Pollutants and contaminated materials that are recovered in cleanup operations will be disposed in accordance with applicable State and Federal regulations. These actions shall be performed by the designated Project ECC, or in the absence of a Project ECC, the District ECC.

19 14. REPORTING

A written report should be generated at the time of discovery using Annex 2 of this plan. The Operations Manager or representative has the responsibility to provide a copy of this report without delay to the following:

- a. Chief, Operations Division
- b. Chief, Public Affairs
- c. Commander
- d. Emergency Management (moderate to large-scale spills)
- e. District ECC (all reportable quantity spills)
- f. Safety & Health Office (moderate to large-scale spills)

Timely updates should follow until the incident is resolved. Post-spill reporting is required by the National Contingency Plan under 40 CFR Part 300.115 for oil spill response and under 40 CFR Part 300.160 for hazardous substance, pollutants or contaminants. Specific forms and instructions for completing this task are available from the Oregon DEQ, Washington DOE, USCG or US EPA.

20 15. PUBLIC INFORMATION

The Public Affairs Office (PAO) representative will determine on a case-by-case basis what services shall be required. For larger events it may be necessary for a public affairs representative to go to the scene to assist in handling news media inquiries. For smaller events or prior to the arrival of a PAO representative the Incident Commander may choose to appoint an Information Officer to assist with on-site news media inquiries. All telephone media inquiries should be referred to the District PAO or the on-call public affairs specialist.

Discussions with the news media will be limited to Corps of Engineers actions and appropriate project information. POC's for other agency's spokespersons will be provided to the news media. To the extent possible and appropriate, the PAO representative shall coordinate with District Counsel prior to releasing official statements. When the U.S. Coast Guard or the Environmental Protection Agency is involved in the spill their offices will be responsible for handling public information matters unless otherwise delegated. The Corps PAO will either coordinate joint news releases with other involved agencies about the Corps involvement or issue separate news releases as appropriate.

21 16. TRAINING

a. Hazard Communication Training. All Responders and Incident Commanders require appropriate training to become compliant with the "hazardous of non-routine task" section of the project-specific Hazard Communication Plan. They shall be made aware of potential hazards that are non-routine and respond appropriately following procedures in this Spill Action Plan and the Operational Project Hazard Communication Plan. Responders will also become familiar with the Incident Command System. All Responders and Incident Commanders must be familiar with the hazards that project chemicals may present.

Annex 6 provides a list of hazardous materials by location for each project covered under this plan. Also refer to the hazardous chemical list in the Hazard Communication Plan.

A formal record indicating the date of the course, hours of training and subject matter covered should be maintained by the project office.

b. Incident Command System Training. Incident Commanders are required to complete training on the Incident Command System. Annual refresher training shall be conducted to maintain their competency. Training shall utilize tabletop exercises, video resources, and hands-on experience to achieve the required competencies. This course should include implementation of the project's Spill Action Plan. A formal record indicating the date of the course, hours of training and subject matter covered should be maintained by the project office.

22 17. DISTRIBUTION

In accordance with federal, state and local regulations, a copy of this document is provided to spill response agencies and all other interested parties. Project-specific annexes have been removed to protect Privacy Act information. To conserve natural resources, this plan is also available via electronic format.

1.1 ANNEX SPILL EMERGENCY - NOTIFICATION CHECKLIST

The “Your Project” Notification List

Date: _____

Substance: _____ Amount: _____

ALL SPILLS ARE CALLED INTO THE CONTROL ROOM:

The Control Room 211 or 333 or

CONTROL ROOM CALLS:

1. Operations Manager:
(or) Assistant Operations Manager:
2. Project Incident Commander, ECC:
Cell or Home

Kenneth Breiten
(509) 540-6094
Stephanie Thomas
(b)(6)

ECC - Spill Emergency Notification:

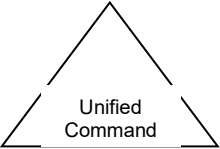
- | | |
|---|----------------|
| 1. National Response Center (NRC) | (800) 424-8802 |
| 2. Oregon Emergency Response System (OERS) | (800) 452-0311 |
| 3. Washington Emergency Management Division | (800) 258-5990 |
| 4. Walla Walla District ECC | (509) 527-7121 |
| 5. Washington State Patrol | (800) 283.7803 |

Operations Manager will contact:

- | | |
|---|----------------|
| 1. Chief, Operations Division | (509) 527-7101 |
| (or) Assistant Chief, Operations Division | (509) 527-7111 |
| 2. Chief, Public Affairs Office | (509) 527-7015 |
| (or) Alternate: | |

1.2 ANNEX 2:ICS 201 AND 202 FORMS

1. Incident Name	2. Prepared by: (name) Date _____ Time: _____	INCIDENT BRIEFING ICS 201-OS (pg 1 of 4)
Map/Sketch (include maps drawn here or attached, showing the total area of operations, the incident site/area, overflight results, trajectories, Impacted shorelines, or other graphics depicting situational and response status)		
<div style="height: 600px;"></div>		
INCIDENT BRIEFING		ICS 201-OS (pg 1 of 4)
1. Incident Name	2. Prepared by: (name) Date _____ Time: _____	INCIDENT BRIEFING ICS 201-OS (pg 2 of 4)

1. Incident Name	2. Prepared by: (name) Date _____ Time: _____	INCIDENT BRIEFING ICS 201-OS (pg 3 of 4)
<div style="text-align: center; border-bottom: 1px solid black; margin-bottom: 10px;"> 3. Current Organization </div> <div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="width: 30%;">  <div style="margin-top: 40px;"> <div style="display: flex; align-items: center; margin-bottom: 5px;"> <div style="width: 30px; border-bottom: 1px solid black; margin-right: 5px;"></div> Safety Officer </div> <div style="display: flex; align-items: center; margin-bottom: 5px;"> <div style="width: 30px; border-bottom: 1px solid black; margin-right: 5px;"></div> Liaison Officer </div> <div style="display: flex; align-items: center;"> <div style="width: 30px; border-bottom: 1px solid black; margin-right: 5px;"></div> Information Officer </div> </div> </div> <div style="width: 65%;"> <div style="margin-bottom: 20px;"> FOSC _____ SOSC _____ RPIC _____ _____ _____ </div> <div style="margin-left: 100px;"> _____ _____ _____ </div> </div> </div> <div style="margin-top: 20px; display: flex; justify-content: space-between;"> <div style="width: 22%;"> <div style="border: 1px solid black; padding: 2px; text-align: center;">Operations Section</div> <div style="border: 1px solid black; height: 20px; margin-top: 2px;"></div> </div> <div style="width: 22%;"> <div style="border: 1px solid black; padding: 2px; text-align: center;">Planning Section</div> <div style="border: 1px solid black; height: 20px; margin-top: 2px;"></div> </div> <div style="width: 22%;"> <div style="border: 1px solid black; padding: 2px; text-align: center;">Logistics Section</div> <div style="border: 1px solid black; height: 20px; margin-top: 2px;"></div> </div> <div style="width: 22%;"> <div style="border: 1px solid black; padding: 2px; text-align: center;">Finance Section</div> <div style="border: 1px solid black; height: 20px; margin-top: 2px;"></div> </div> </div> <div style="margin-top: 10px;"> <div style="display: flex; align-items: center;"> <div style="width: 10px; border-left: 1px solid black; height: 100px; margin-right: 5px;"></div> <div style="display: flex; flex-direction: column; gap: 10px;"> <div style="border: 1px solid black; padding: 2px; text-align: center;">Div./Group</div> <div style="border: 1px solid black; height: 20px; margin-top: 2px;"></div> <div style="border: 1px solid black; padding: 2px; text-align: center;">Div./Group</div> <div style="border: 1px solid black; height: 20px; margin-top: 2px;"></div> <div style="border: 1px solid black; padding: 2px; text-align: center;">Div./Group</div> <div style="border: 1px solid black; height: 20px; margin-top: 2px;"></div> <div style="border: 1px solid black; padding: 2px; text-align: center;">Div./Group</div> <div style="border: 1px solid black; height: 20px; margin-top: 2px;"></div> </div> </div> </div>		
<div style="display: flex; justify-content: space-between;"> INCIDENT BRIEFING June 2000 ICS 201-OS (pg 3 of 4) </div>		

A-19

1. Incident Name	2. Operational Period (Date/Time) From: To:	INCIDENT OBJECTIVES ICS 202-OS
3. Overall Incident Objective(s)		
4. Objectives for specified Operational Period		
5. Safety Message for Specified Operational Period		
Approved Site Safety Plan Located at:		
6. Weather	See Attached Weather Sheet	
7. Tides/Currents	See Attached Tide/Current Data	
8. Time of Sunrise	Time of Sunset	
9. Attachments (mark "X" if attached)		
<input type="checkbox"/> Organization List (ICS 203-OS)	<input type="checkbox"/> Medical Plan (ICS 206-OS)	<input type="checkbox"/> Resource at Risk Summary (ICS 232-OS)
<input type="checkbox"/> Assignment List (ICS 204-OS)	<input type="checkbox"/> Incident Map(s)	<input type="checkbox"/> _____
<input type="checkbox"/> Communications List (ICS 205-OS)	<input type="checkbox"/> Traffic Plan	<input type="checkbox"/> _____
10. Prepared by: (Planning Section Chief)	Date/Time	
INCIDENT OBJECTIVES	June 2000	ICS 202-OS

1.3 ANNEX 3: SPILL EMERGENCY - ACTIVITY HAZARD ANALYSIS

Site Safety Officer: _____

Date/Time/Location: _____

ACTIVITY	HAZARD	CONTROL
1.Site Assessment	Fire & Explosion	Responders will approach the site upwind using “buddy system” for purposes of establishing a safe perimeter. To avoid fire/explosion hazard a strict no-smoking zone will be enforced and no devices will be brought into the spill area that could become a source of ignition.
	Asphyxiation	Responders will remain upwind and not enter the spill area. Spills in enclosed or confined spaces are particularly dangerous. No entry is authorized.
	Inhalation Hazard	If unknown materials are involved in the spill, or if known materials are mixed, immediately withdraw to a safe upwind location. If either known or unknown materials are involved in combustion, do not approach site. Air monitoring for oxygen, explosivity, and toxins may be required before crews can safely enter.
2.Site Security	Vehicle & Pedestrian Accidents	Road closures and site security should be established with high-visibility glow-sticks (avoid use of flares). Utilize orange warning lights, glow-sticks on helmets, high visibility vests and danger/caution signage well in advance of site. Obtain assistance from law enforcement for traffic & pedestrian control.
3.General Site Work	Slips, Trips, Falls	Responders shall follow standard project work practices. Emergency condition does not waive clothing, helmet, footwear, etc. requirements.
	Illumination	Work areas shall be adequately illuminated by the most practical means available. This may include portable lights, hand-held lights, or headlamps. Work shall be delayed until adequate lighting is provided.
4.Working Around Waterways	Drowning, Hypothermia	Responders shall wear Personal Floatation Devices while working on/near water. This includes shorelines. During cold weather conditions boat crews will wear immersion jackets or suits following standard project work practices. “Throw Bags/Ropes” designed for rescue work shall be on-site at all times. Water rescue services shall be pre-determined by the Safety Officer who shall ensure that immediate response capability exists during all work periods.
5.Oil Spill Cleanup	Chemical Exposure	Responders shall not perform oil spill cleanup unless it falls under incidental spill. If the spill cannot be cleaned up under the Hazard Communication Standard, HAZWOPER-trained contractor services must be called.

1.4 ANNEX 4: SPILL EMERGENCY - CONTRACTORS

Note: The following contractors are signatory to the USCG Basic Ordering Agreement (BOA)* and therefore have pre-priced all goods and services. Contracts may be established with these companies using the USCG BOA. All actions should include a not-to-exceed clause and be approved by a District Contracting Officer prior to commencing work. Alternative Contractors may be utilized provided they meet or exceed the qualifications or expertise of BOA Contractors and adhere to strict health, safety and environmental protection standards.

<u>Contractor</u>	<u>24-Hour Tele. No.</u>	<u>Expertise</u>
NRC	800-337-7455	Oil & Hazardous Substance Spills, Land & Water

* The USCG Basic Ordering Agreement (BOA) is an agreement between the USCG, Maintenance and Logistics Command – Pacific, and numerous spill response firms located in the Pacific area. Walla Walla District has been included on each of the above BOA's as an "Authorized Ordering Office". The contract scope includes "Services, materials and equipment to contain, cleanup, and/or mitigate the harmful effects of oil and hazardous substance spills on or in waters subject to the jurisdiction of the United States as well as the bottoms and adjoining shorelines of such waters" (USCG BOA, Section C, Description/Specifications, 1997).

ANNEX 7: DEFINITIONS

Chief, Contracting Division. The Chief, Contracting Division is responsible for providing emergency contracting services. This includes providing after-hours telephone numbers for three Contracting Officers who have authority to contract for spill response services. During spill emergencies, contracting shall be expedited in the interest of health and safety and the environment.

Chief, Operations Division. The Chief, Operations Division is responsible for providing resources to the Operations Managers to effectively train, exercise, and respond to spills. The Operations Division Chief is also responsible for providing adequate resources to the District ECC to enable annual revision of the Spill Response Plan; annual refresher training for designated Incident Commanders; and appropriate field exercises. Finally, the Chief, Operations is the approval authority for this Spill Response Plan following coordination and consultation with other key District elements.

Chief, Public Affairs Office. The Chief, Public Affairs Office is responsible for providing accurate and current information to the public, as well as Corps employees, about an incident in a timely manner. The PAO will also provide Incident Commanders with information about opportunities for media and crisis communication training and with “Working with the News Media” tips. Additional description of this responsibility is provided in Section 15, “Public Information.”

Chief, Readiness Branch. The Chief, Readiness Branch is responsible for providing situation reports to Division and Headquarters offices following major spill events; coordinating support for major spills and staffing the Emergency Operations Center as appropriate.

Commander, Walla Walla District. The Commander, Walla Walla District has the overall responsibility for ensuring that effective spill response plans are prepared and spill responses are safely and efficiently executed. The Commander shall ensure that the Chief, Operations Division has the resources and authority to carry out these assignments.

Construction Projects. For the purpose of this Plan construction projects include the field activities of supply contracts, construction contracts and small purchase contracts where the Resident Engineer is designated responsibility for overseeing contractor field activities.

Discharge: “Discharge” includes, but is not limited to, any spilling, leaking, pumping, pouring, emitting, emptying, or dumping of *oil*, but excludes discharges in compliance with a permit under section 402 of the CWA [NCP].

Discharge of Oil – Size Classifications. Refers to size classes of oil discharges provided as guidance to the On-Scene-Coordinator (OSC). They are not meant to imply associated degrees of hazard to public health or welfare of the United States, nor are they a measure of environmental injury. Any oil discharge that poses a substantial threat to public health or welfare

of the United States or the environment or results in significant public concern shall be classified as a major discharge regardless of the following quantitative measures:

- (1) Minor discharge means a discharge to the inland waters of less than 1,000 gallons of oil or a discharge to the coastal waters of less than 10,000 gallons of oil.
- (2) Medium discharge means a discharge of 1,000 to 10,000 gallons of oil to the inland waters or a discharge of 10,000 to 100,000 gallons of oil to the coastal waters
- (3) Major discharge means a discharge of more than 10,000 gallons of oil to the inland waters or more than 100,000 gallons of oil to the coastal waters [NCP]

District Environmental Compliance Coordinator (District ECC): The District ECC coordinates the Spill Program. This includes annually updating the Spill Plan to ensure that it meets applicable regulations and field requirements. In addition, the District ECC provides coordination and technical assistance as requested during spill emergencies; coordinates annual training for Incident Commanders and First Responders; and provides exercises to field projects on request. For larger spill events, the District ECC coordinates additional District resources as needed.

District Safety Officer: The District Safety Officer is responsible for providing safety and health oversight on all activities in the Walla Walla District including the spill response program. This includes planning, exercises, training, and response operations. The District Safety Officer also provides technical advice and guidance on specific topics pertinent to spill response operations.

Federal On-Scene Coordinator (FOSC): Individual pre-designated by the EPA, USCG, Department of Energy or Department of Defense (DOD) to coordinate and direct Federal responses in accordance with the National Contingency Plan [NCP]. For discharges of oil or releases of hazardous substances when the discharge or release is on, or the sole source is from, any facility or vessel under the jurisdiction, custody or control of the US Army Corps of Engineers-Walla Walla, the EPA shall be utilized as the FOSC.

Geographic Response Plan (GRP): Appendices to the NWACP. Describes resource priorities, protection and cleanup strategies, and local logistical information. Generally used on larger spill events to help determine the best use of limited resources.

Hazard Communication Standard: Common term used to describe OSHA's 29 CFR 1910.1200, "Hazard Communication," which covers the physical or health hazards employees encounter while working with chemicals during routine or non-routine operations.

Hazardous Substance: Substances capable of doing harm to human health or the environment. As defined by the National Contingency Plan, "Any substance designated pursuant to section 311 of the Clean Water Act; any element, compound, mixture, solution, or substance designated pursuant to section 102 of CERCLA; any hazardous waste having the characteristics identified under or listed pursuant to section 3001 of the Solid Waste Disposal Act; any toxic pollutant

listed under section 307(a) of the Clean Water Act; any hazardous air pollutant listed under section 112 of the Clean Air Act; and any imminently hazardous chemical substance or mixture with respect to which the EPA Administrator has taken action pursuant to section 7 of the Toxic Substances Control Act” [NCP].

HAZWOPER: Common acronym for OSHA’s 29 CFR 1910.120, “Hazardous Waste Operations and Emergency Response,” which covers among other subjects, employees responding to hazardous substance releases.

Hazardous Substance Release Classification: Size classes of releases refers to the following size classifications which are provided as guidance to the OSC for meeting pollution reporting requirements in subpart B (of the National Contingency Plan). The final determination of the appropriate classification of a release will be made by the OSC based on consideration of the particular release (e.g., size, location, impact, etc.):

(1) Minor release means a release of a quantity of hazardous substance(s), pollutant(s), or contaminant(s) that poses minimal threat to public health or welfare of the United States or the environment.

(2) Medium release means a release not meeting the criteria for classification as a minor or major release.

(3) Major release means a release of any quantity of hazardous substance(s), pollutant(s), or contaminant(s) that poses a substantial threat to public health or welfare of the United States or the environment or results in significant public concern [NCP].

Incident Action Plan (IAP): Short, concise response plan developed by the designated Incident Commander prior to initiating response actions for each operation period. Includes strategic goals (what to do) and tactical objectives (who will do & how). (ICS 201 and 202 forms, annex 2)

Incident Commanders: Individuals designated by the Operations Manager (or vessel Captain) to be responsible for managing spill emergencies. Incident Commanders shall be thoroughly familiar with and able to execute the project’s Spill Plan. They shall be familiar with both the Northwest Area Contingency Plan and the National Contingency Plan. During spill events, Incident Commanders are responsible for determining incident priorities, strategic goals and tactical objectives; developing an “Incident Action Plan;” establishing an incident command structure; and assessing response needs and directing resources to meet those needs. Incident Commanders are also responsible for preventing injuries and/or deaths of response personnel. To maintain expertise, Incident Commanders are required to complete annual refresher training.

Incident Command System (ICS): The Incident Command System is an “all risk” management system designed to allow for the day-to-day management of response efforts from the very small to the largest incidents involving multi-agency jurisdictions. The ICS uses an Incident Commander to lead the response effort as well as a Safety Officer and Operations, Planning, Logistics, and Finance Chiefs for support.

Incidental Spill: An incidental spill is a release of a hazardous substance where the substance can be absorbed, neutralized, or otherwise controlled at the time of the release by employees in the immediate release area, or by maintenance personnel. Responses to releases of hazardous substances where there is no potential safety or health (i.e., fire, explosion, or chemical exposure) are not considered to be emergency responses and can be handled under the Hazard Communication Standard.

Lead Responder: The responder who takes charge of an oil discharge or hazardous substance release until a designated Incident Commander arrives at the scene. Usually will be a crew leader, foreman, or field supervisor.

Material Safety Data Sheet (MSDS): Written or printed document containing safety, health and environmental information about a hazardous chemical.

National Oil and Hazardous Substances Pollution Contingency Plan (NCP): A comprehensive plan included under CERCLA “to provide the organizational structure and procedures for preparing for and responding to discharges of oil and releases of hazardous substances, pollutants and contaminants” (NCP).

Northwest Area Contingency Plan (NWACP): The primary spill preparedness and response-planning document for the Pacific Northwest and an extension of the NCP. The NWACP is the summation of policies and procedures for two Coast Guard Captain of the Port Zones, EPA Inland Region Ten, and for the States of Oregon, Idaho, and Washington. It provides federal, state, and local responders in the Pacific Northwest a single comprehensive planning and response document [NWACP].

Office of Counsel: The Office of Counsel is responsible for providing legal review and advice to help assure compliance with Federal and State laws and regulations. During spill emergencies the Office of Counsel shall be kept informed by the Operations Manager (or their designee) and shall be available for consultation with the designated Incident Commander.

On Scene Coordinator (OSC): Federal, State or Local representative responsible for managing an oil or hazardous substance spill emergency. Common designations include FOSC and OSC respectively. On Scene Coordinators typically work together within a Unified Command, along with the Responsible Party (RP) and Tribes, to accomplish their tasks.

Operations Manager: The Operations Manager (OM) is the US Army Corps of Engineers senior manager in charge of a Corps facility. The OM is responsible for assigning work and committing resources. The OM is also responsible for the prevention of, and response to all discharges of oil or releases of hazardous substances occurring on the project except for Construction Projects under the control of the Resident Engineer. The OM ensures that the project’s Spill Plan is current and that all Incident Commanders and Responders are properly designated, equipped, trained and exercised. The OM shall provide resources to the Incident Commander to safely and effectively respond to spills.

OSHA Emergency Action Plan: A facility based plan required by OSHA for the protection of workers expected to react to emergencies. This Spill Plan has been prepared as part of the requirements of an OSHA Emergency Action Plan.

Project Environmental Compliance Coordinator (Project ECC): The Project ECC is responsible for coordinating environmental compliance programs at the operational project. In the event of a spill emergency, the Project ECC serves as one of several designated Incident Commander's. All post-spill cleanup, waste disposal and reporting activities are coordinated through the Project ECC.

Project Safety Coordinator. At some Corps projects, a Project Safety Coordinator has been designated to coordinate safety programs. This function may be incorporated into the Project ECC position. During spill emergencies, the Project Safety Coordinator is expected to ensure that normal safety and health procedures are followed and that any excess risks to personnel are identified and properly controlled.

“Reportable Quantity” Spill: Non-permitted release of a hazardous substance into the environment within a 24-hour period of time and equal to or greater than a specific quantity in pounds. Environment is defined as air, land, surface water, and ground water. Quantities are identified in several tables, which are as follows. A “*CERCLA*” hazardous substance release equals or exceeds quantities specified in 40 CFR Table 302.4. A “*Clean Water Act*” hazardous substance release equals or exceeds quantities specified in 40 CFR Table 117.3. A “*SARA Title III*” “Extremely Hazardous Substance” equals or exceeds those specified in Appendices A and B of 40 CFR 355.20. A reportable quantity spill of oil occurs when oil is *discharged* without a permit into the environment and forms a sheen on water or adjoining shorelines; violates water quality standards; or causes a sludge or emulsion beneath the surface or on adjoining shorelines. These conditions represent a “Reportable Quantity Spill.”

Regulatory Agency: Any Federal, State or local agency with the authority or responsibility for emergency spill response activities. Principal regulatory agencies within the Walla Walla District are US EPA, Region 10; USCG-Portland; Oregon Department of Environmental Quality; Washington Department of Ecology; Idaho Department of Environmental Quality; Oregon Emergency Management; Washington State Emergency Management Division; Fed-OSHA; Washington Department of Labor and Industries; Oregon-OSHA; County Governments; and local fire response organizations.

Resident Engineer: The Resident Engineer is responsible for providing oversight on District construction projects. For each project, a Project Engineer, construction representative, or inspector is assigned who reports to the Resident Engineer. Management of spills by Construction Contractors falls under the authority of the Resident Engineer.

Responders. Responders are Corps employees who have been trained and authorized to safely respond to spills and execute the Spill Plan. They may be required to manage the scene of a spill until an Incident Commander or alternate responds to the spill. Project Responders are required to complete training in accordance with the Hazard Communication Standard.

Safety Officer: Individual designated by the Incident Commander to prepare a site safety and health plan for response personnel; assess safety and health hazards on an ongoing basis; ensure daily or more frequent safety briefings are conducted; ensure response personnel meet OSHA training requirements; work with the Unified Command to ensure consistent safety standards are met by varying response agencies; establish personnel protective equipment and decontamination procedures; and work with local public health officials.

Spill Emergency: An emergency spill is a release of a hazardous substance where the substance cannot be absorbed, neutralized, or otherwise controlled at the time of the release by employees in the immediate release area, or by maintenance personnel. Responses to releases of hazardous substances where there is potential safety or health hazard (i.e., fire, explosion, or chemical exposure) are considered to be emergency responses and shall be handled under the HAZWOPER standard.

Spill Prevention, Control, and Countermeasures Plan (SPCC): Facility oil spill preparedness and response plan. Detailed engineering document focused on oil spill prevention and control. Must be reviewed and certified by a Registered Professional Engineer familiar with 40 CFR Part 112, at the time of preparation and at least once every five years, and amended to include more effective prevention and control technology, if feasible. If oil spill containment will not completely prevent accidental discharge to navigable waters, a strong “oil spill contingency plan” is required. This District Action Spill Plan serves as the “oil spill contingency plan” in accordance with SPCC regulations.

Unified Command System: The Unified Command System is an extension of the Incident Command System where decisions are made with the joint input of several agencies representing their individual jurisdictions. The FOSC has ultimate authority to resolve any disputed decision and act appropriately.

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APPENDIX B: CERTIFICATION OF SUBSTANCIAL HARM DETERMINATION

SPILL PREVENTION, CONTROL AND COUNTERMEASURE PLAN
Little Goose Project, Dayton WA

CERTIFICATION OF SUBSTANCIAL HARM DETERMINATION

1. Does the facility transfer oil over water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons?

☐ Yes ☒ No
2. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation within any aboveground oil storage tank area?

☐ Yes ☒ No
3. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula in Attachment C-III, 40 CFR Parts 9 and II 2 or a comparable formula) such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments? For further description of fish and wildlife and sensitive environments, see Appendices I, II, and III to DOC/NOAA's "Guidance for Facility and Vessel Response Plans: Fish and Wildlife and Sensitive Environments" (see Appendix D, Section 10, 40 CFR Parts 9 and 112 for availability) and the applicable Area Contingency Plan.

☐ Yes ☒ No
4. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula in Attachment C-111, 40 CFR Parts 9 and 112 or a comparable formula) such that a discharge from the facility would shut down a public drinking water intake?

☐ Yes ☒ No
5. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and has the facility experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last 5 years?

☐ Yes ☒ No

Certification

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate and complete.

Signature: _____ Date: _____

Name: _____ Title: _____

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APPENDIX C: PLAN REVIEW AND AMMENDMENTS

SPCC PLAN REVIEW AND AMENDMENT LOG

[illegible]

1. A registered Professional Engineer must certify any changes that materially affect the facility's potential to have a spill.

After reviewing, the SPCC Coordinator must certify the Plan with one of the following statements. If there are no changes that may materially affect the potential for discharge, the Plan for this facility must be reviewed no later than XXXX 2015.

If No Revisions Are Needed

I have reviewed and evaluated the SPCC Plan for this facility and as a result, will not make any revisions. The Plan for this facility was certified by a PE in XXXX 2010. Since that time, there have been no changes in the facility design, construction, operation or maintenance that materially affects the facility's potential to discharge oil product.

Signature:

Title:

Date:

If Revisions Are Needed

I have reviewed and evaluated the SPCC Plan for this facility and as a result, will make revisions. The revisions must be completed and implemented within six months of this review. Technical revisions must be certified by a PE.

Signature:

Title:

Date:

APPENDIX D: DIAGRAMS

APPENDIX E: EMERGENCY CONTACT INFORMATION

Standing Order No. RPT – 3

Little Goose Project

1. If an employee, other than an Operator, discovers a spill to the environment (air, water, or soil) or visible oil sheen, report it to Little Goose Control Room, ext. 231 or (509) 399-2233.

The **SHIFT OPERATOR** will notify the following agencies **IMMEDIATELY** with whatever information is available. The Operator then will notify the Environmental Protection Specialist (ECC) and the Operations Manager. The caller or ECC will call back with updates when appropriate

National Response Center	(800) 424-8802
Washington Department of Emergency Management	(800) 258-5990
Columbia County Emergency Management	(509) 382-2534

The following information must be provided:

- US Army Corps of Engineers
- Little Goose Lock and Dam, 1001 Little Goose Dam Road, Dayton, WA 99328
- Columbia County
- River Mile 70.3 if at dam, or other location
- General information on spill—date/time of spill, product, estimated amount, whether contained or not, clean-up actions taken or to be taken, current weather conditions, etc.
- Call-back number for follow up

2. The ECC/Ops Sup will evaluate the situation and will notify Fisheries Biologist, George Melanson, and the following personnel as appropriate to take necessary action:

- | | |
|--|--|
| * Operations Manager – Kenneth Breiten | * Natural Resource Manager – Joe Maxwell |
| * Electrical Crew Foreman – Jim Simonsen | * Mechanical Foreman – Tony Sijohn |
| * Chief of Operations – Vacant | |

3. Once spill has been reported and notifications made an action team may need to assemble. Action Team should consist of the following people or representative:

- | | |
|--|--|
| * ECC – Stephanie Thomas | * Mechanical Crew Foreman – Tony Sijohn |
| * Operations Manager – Kenneth Breiten | * Electrical Crew Foreman – Jim Simonsen |
| * Chief of Operations – Vacant | |
| * Fish Biologist – George Melanson | |

4. Notifications to the following people will be made if it is a reportable quantity:

Environmental Compliance Coordinator — Damian Walter (509) 527-7121, (509) 540-1503 Chief,
Operations Division — Rick Werner (509) 527-7101

Asst Ch, Operations Division — Andrea Valentine (509) 527-7102

Public Affairs Office — on-call person (509) 527-7020

Fish Biologist — Tim Dykstra (509) 527-7125

Emergency Management—Randall Gordon (509) 527-7041

5. If contractor assistance is needed, Contracting must be notified before contractor is deployed:

Contracting—Wendy Swails (509) 527-7207

Ruthann Haider (509) 527-7201

6. Following an incident, a written report will be distributed as appropriate.

Emergency Phone Call Up List

District Office

Commander Wk. 509-527-7700

Richard Werner - Chief of Operations District Wk. 509-527-7101

Lonnie Mettler- Chief of Natural Resources Management

Wk. 509-527-7131 Cell (b)(6) Hm. (b)(6)

Security Office: Dave Raappana Wk. 509-527-7362 Cell (b)(6)

Safety Office: Michael Remington Wk. 509-527-7361 Cell (b)(6)

Public Affairs Office: 509-527-7020 After hours all calls automatically forward to whoever is on call.

Office of Counsel: Linda Kirts Wk. 509-527-7706 Hm. (b)(6) 2

District Cultural Resources: Mona Wright

Wk. 509- 527-7278 Cell (b)(6) Hm. (b)(6)

Little Goose Dam

Kenneth Breiten – Little Goose Operations Manager

Wk. 509-399-2233, Ext. 251

Cell (b)(6)

Hm. (b)(6)

Control Room 509-399-2233, Ext. 231

Chief of Operations: Vacant

Environmental Compliance Coordinator Stephanie Thomas

Wk. 509-399-2233, Ext. 288

Cell (b)(6)

Natural Resource Management (Rangers)

Joe Maxwell - Natural Resources Manager

Wk. 509-751-0240

John Schroeder Wk. 509-540-1497, Ext. 262

Natural Resource Maintenance

Manager - Joe Maxwell

Wk. 509-751-0240

Norm Rhoads Wk. 509-751-0259

October 11, 2010

Last revision: 10/11/2010

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APPENDIX F: CLEAN-UP AND SAFETY EQUIPMENT

CLEAN-UP AND SAFETY EQUIPMENT

LOCATION	SPILL RESPONSE EQUIPMENT
<p>Powerhouse</p> <p><i>These may be moved as needed, but will generally be located in these designated areas</i></p>	<p><u>Oil Response Kits (4)</u></p> <p><u>1st Floor (1)</u> Near elevator next to ventilation duct work</p> <p>2nd Floor (1) + Floor Drain Cover Halfway between elevator and sewage room</p> <p>3rd Floor (2) + 2 Overpacks One located between unit 3 and 4 downriver side, second one located in compressor room</p> <p>4th Floor (2) + 1 Overpack Located to the right of the main warehouse entrance</p> <p>7th Floor, One 55-gallon kit Located between unit 3 and 4</p> <p>9th Floor, One 55-gallon kit Near elevator entrance</p>
JFF	<p>1- 55 gallon response kit in shop</p> <p>1- box kit for flammable storage building</p> <p>1- 5 gallon kit for lab</p> <p>1- Floor Darin Cover</p>
<p>Oil Rooms</p> <p><i>On first floor</i></p>	<p>2 boxes of absorbent rolls</p> <p>5 boxes of Ultra drain seal</p> <p>2- 5 gallon spill kits</p> <p>1- 20 gallon absorbent Poly Lappack</p> <p>1- 25 gallon bag Oil Dry absorbent</p> <p>1 Bag of absorbent pads</p> <p>7- 95 gallon overpack drums</p>
3rd Floor	One roll of absorbent pads in compressor room
4th Floor	1- 32 gallon trash can of Oil Dri absorbent

	1- 32 gallon trash can of absorbent boom, mats, etc.
5th Floor	2- 5 gallon spill kits in battery room 1 Box of acid neutralizing mats
Warehouse- 4th Floor	1 Haz-mat spill kit 2 Boxes of chemical socks 1 Box of acid neutralizing mats
Warehouse	7 Boxes of absorbent rolls (3" x 20'), 4 per box 4 Boxes of absorbent rolls (3" x 18"), 25 per box 4 Boxes of absorbent rolls (8" x 18"), 12 per box 7 Bags of loose absorbent (DriAbsorbent) 6 Boxes of oil containment boom (3" x 20'), 4 per box 8 Boxes of oil containment boom (5" x 10'), 4 per box 8 Boxes of oil containment boom (8" x 10'), 4 per box 8 Oil skimmer boom/sweep (17" x 50') 4 Boxes of bilge soaker socks (3" x 18"), 25 per box 4 Boxes of sump soaker socks (8" x 18"), 12 per box 3 Floor drain covers 1 Floor drain plug kit (2", 3", 4" plug) 4 Boxes absorbent pan pillows 7 Rolls of 30" x 15' pads 19 Bags of 20" x 16" mat pads (100 pads per bag) 7 Boxes of 22" diameter circular mats/pads, 25 per box 7 Boxes of Oil Dri wipes

Equipment varies from based on what is in stock.

Navlock has 4 bags of 20"X16" mat pads near miter gate room

APPENDIX G: INCIDENT RESPONSE AND INVESTIGATION

TELEPHONE NOTIFICATION LOG

Telephone Notification Log	Facility: Date:
Facility:	
Incident Date / Time / Duration:	
Substance Involved:	
Estimated Quantity Released:	
Immediate Response Actions:	
Other Comments:	

SPILL EMERGENCY - AFTER ACTION REPORT

Incident Summary

Facility Information:

Date of Incident:

Name of Person Reporting Incident:

Phone:

Discharge to Water?

Location of Incident:

Brief Description of Incident:

Incident Type (Check any that apply):

<input type="checkbox"/> Near-Miss <input type="checkbox"/> Vapor Release	<input type="checkbox"/> Liquid Spill <input type="checkbox"/> Fire/Explosion	Other:
--	--	--------

Primary Source of Release (Check One):

<input type="checkbox"/> Oil Drain Valve <input type="checkbox"/> Compressor <input type="checkbox"/> Condenser <input type="checkbox"/> Turbine	<input type="checkbox"/> Pump <input type="checkbox"/> Pressure Vessel <input type="checkbox"/> Piping <input type="checkbox"/> Manual Valve	<input type="checkbox"/> Pressure Relief Valve <input type="checkbox"/> Automatic Control Valve <input type="checkbox"/> Charging Connection/Source <input type="checkbox"/> Other
---	---	---

Cause(s) Contributing to Release (Check any that apply):

<input type="checkbox"/> Human Factors <input type="checkbox"/> Design Shortcoming <input type="checkbox"/> Misapplied Equipment <input type="checkbox"/> Power Failure <input type="checkbox"/> Corrosion <input type="checkbox"/> Inadequate Maintenance <input type="checkbox"/> Earthquake	<input type="checkbox"/> Equipment Defect/Malfunction <input type="checkbox"/> Improper Installation <input type="checkbox"/> Mechanical Damage <input type="checkbox"/> Hydrostatic Expansion <input type="checkbox"/> Hydraulic Shock <input type="checkbox"/> Inadequate Administrative Controls	<input type="checkbox"/> Controls Failure <input type="checkbox"/> Process Upset <input type="checkbox"/> Other Emergency <input type="checkbox"/> System Change <input type="checkbox"/> Maintenance Activity <input type="checkbox"/> Inadequate Labeling
--	--	--

Types of Changes Recommended to Prevent Recurrence (Check any that apply):

<u>Administrative Changes</u>	<u>Engineering Changes</u>
<input type="checkbox"/> Operating Procedures <input type="checkbox"/> Additional Training <input type="checkbox"/> Emergency Response Procedures <input type="checkbox"/> Safe Work Practices <input type="checkbox"/> Labeling/Identification <input type="checkbox"/> Maintenance Procedures <input type="checkbox"/> Management of Change Procedures	<input type="checkbox"/> Design <input type="checkbox"/> Equipment <input type="checkbox"/> Piping <input type="checkbox"/> Safety Equipment <input type="checkbox"/> Mechanical Protection Access <input type="checkbox"/> Controls

Results of Incident (Provide Requested Information):

Total Quantity of Substance Released:	_____
Estimate of Property/Product Damages:	_____
Number of Serious Injuries:	_____

Number of Fatalities: _____

Other (Describe): _____

Incident Investigation - Incident Description

Location, Date, Time and Duration of Incident:

Circumstances Leading up to Incident:

Events and Actions as Incident Unfolded:

Incident Investigation – Incident Cause

Investigation Team's Assessment of Root Cause of Incident:

Investigation Team's Assessment of Additional Contributing Causes:

Actions or Circumstances Which Either Helped to Minimize the Effects of the Incident or Which Could Have Minimized the Effects:

Continue on additional pages if needed.

Incident Information Survey Sheet

Date: Time:
Location:
Name and Telephone Number of On-Scene Commander Contracted:
Nearby Populations:
Type of Release: Leak Fire Spill Other:
Time of Release:
Medical Emergency Information:
Number of Injured or Dead:
Where were they taken?
Name of Material Released:
Container Type: Truck Tank Drum Other:
General Characteristic of Material:
Physical State of Material:
Total Amount of Material Released:
Other Oil or Hazardous Material in Area:
Estimate the Amount of Material Entering:
 Soil:
 Stormwater Drainage System:
 Oily/Water Separator: Holding Ponds:
 Other Drains:
 Other Water Bodies:
Direction of Flow of Release:
General Weather Conditions:
 Wind Speed:
 Wind Direction:
 Drain Fall During Incident:
Emergency Response Personnel at Scene:
Other Personnel or Agencies at Scene:
Action Taken:

Reporting Person:

Date:

Verbal Immediate Emergency Spill Reporting

Reporter Name:

Reporter Telephone Number:

Entity Represented by Reporter:

Facility Name:

Facility Address:

Location of Incident:

Date of Incident:

Time of Incident:

Duration of Release:

Type of Material Released:

Chemical Name of Material Released:

Quantity of Material Released:

Type of Incident:

Nature of Oil or Hazardous Materials Involved:

Media of Release (into water or land):

Actions Taken to Respond and Contain Release:

Continuing Danger to Life Existing at Scene:

Injuries to Personnel:

Extent of Injuries:

Possible Harm to Human Health or the Environment Outside the Facility:

Any known or anticipated acute or chronic health risks.

Advice regarding medical attention necessary for exposed individuals.

Proper precautions to take as a result of release.

Evacuation requirements as a result of release.

Spill History Form

Location	Date	Spill Media	Spill Amount	Corrective Action Taken

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APPENDIX H: OIL SHEEN REFERENCES

OIL SHEEN REFERENCE

Standard Terms for High Viscosity Oil Films and
Descriptive Appearance of High Viscosity Oil on Water

Standard Term	Approximate Film Thickness		Approximate Quantity of Oil in Film		Appearance
	10 ⁻⁶ mm	10 ⁻⁶ in	Gallons per Square Mile	Liters per Square Kilometer	
Barely	1.5	0.04	25	44	Barely visible under most favorable light conditions.
Silvery	3	0.08	50	88	Visible as a silvery sheen on water surface.
Slightly	3	0.15	100	176	First Trace of color may be observed.
Brightly	12	0.3	200	351	Bright hands of color may be observed.
Dull	40	1.0	666	1,168	Colors begin to turn dull brown.
Dark	80	2.0	1,332	2,337	Colors are much darker brown or black.

NOTE: Each 1-inch thickness of oil equals 5.61 gallons per square yard or 17,378,909 U.S. gallons per square mile.

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APPENDIX I: INSPECTIONS/MONITORING/RECORDING

PETROLEUM TRANSFER INVENTORY CHECK

Instructions: This petroleum inventory record should be completed for each container during a transfer event.

Date _____ Name of Attendant _____

Container Location/Description _____

Date	Initial Volume	Final Volume	Total Added

- *Make entry for each fill event or when the tank level is checked*

LOG OF MONITOR SYSTEM INSPECTION

USACE Facility Location: _____

Tank	Date	Result (Pass/Fail)

SUMP VERIFICATION LOG

(To be completed prior to operating sump in manual operation)

Inspected By: _____

Inspection Date: _____

Any sheen on the water (Y/N): _____

If "N", safe to operate sump manually.

If "Y", clean sump and reverify.

Signature: _____

Inspected By: _____

Inspection Date: _____

Any sheen on the water (Y/N): _____

If "N", safe to operate sump manually.

If "Y", clean sump and reverify.

Signature: _____

Inspected By: _____

Inspection Date: _____

Any sheen on the water (Y/N): _____

If "N", safe to operate sump manually.

If "Y", clean sump and reverify.

Signature: _____

Inspected By: _____

Inspection Date: _____

Any sheen on the water (Y/N): _____

If "N", safe to operate sump manually.

If "Y", clean sump and reverify.

Signature: _____

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OIL/WATER SUMP INSPECTION SHEET

Location	Description	Date/Time	Sump/OWS visually free of contaminants (Y/N)	Sump/OWS contaminant free after manual test (Y/N)	Comments

STORMWATER DISCHARGE INSPECTION LOG

Location	Description	Date/Time	Employee		Water Free of Contaminants Prior to Discharge (Y/N)	Valve Closed After Discharge Event (Y/N)	Comments
			Print Name	Sign Name			

SPCC FIELD INSPECTION AND PLAN REVIEW TABLE

Documentation of Field Observations for Containers and Associated Requirements

Inspectors should use this table to document observations of containers as needed.

Containers and Piping

Check containers for leaks, specifically looking for: drip marks, discoloration of tanks, puddles containing spilled or leaked material, corrosion, cracks, and localized dead vegetation, and standards/specifications of construction.

Check foundation for: cracks, discoloration, puddles containing spilled or leaked material, settling, gaps between container and foundation, and damage caused by vegetation roots.

Check piping for: droplets of stored material, discoloration, corrosion, bowing of pipe between supports, evidence of stored material seepage from valves or seals, and localized dead vegetation. (Document in comments section of §112.8(d) / §112.12(d).)

Secondary Containment (Active and Passive)

Check secondary containment for: containment system (including walls and floor) ability to contain oil such that oil will not escape the containment system before cleanup occurs, proper sizing, cracks, discoloration, presence of spilled or leaked material (standing liquid), erosion, corrosion, and valve conditions.

Check dike or berm systems for: level of precipitation in dike/available capacity, operational status of drainage valves (closed), dike or berm impermeability, debris, erosion, impermeability of the earthen floor/walls of diked area, and location/status of pipes, inlets, drainage around and beneath containers, presence of oil discharges within diked areas.

Check retention and drainage ponds for: erosion, available capacity, presence of spilled or leaked material, debris, and stressed vegetation.

Check active measures (countermeasures) for: amount indicated in plan is available and appropriate; deployment procedures are realistic; material is located so that they are readily available; efficacy of discharge detection; availability of personnel and training, appropriateness of measures to prevent a discharge as described in §112.1(b).

Container ID	General Condition	Storage Capacity	Type of Oil	Type of Containment	Overfill Protection	Inspections

ABOVEGROUND STORAGE TANK INSPECTION CHECKLIST

Symbols: **Y: Yes** **N: No** **S: Satisfactory** **U: Unsatisfactory**

Name			Location		
Date		Inspector		Product	
Item	Symbol	Comments			Referred To
Facility Area					
Fencing	S	U			
Fill box padlocks	S	U			
Lighting	S	U			
Catch basins	S	U			
Manholes	S	U			
Other drainage areas	S	U			
Tank Area					
Check for water level in tanks	Y	N			
Metering and alarm system	Y	N			
Leak detection system	Y	N			
Spill kits in place	Y	N			
Fire extinguishers in place	Y	N			
No smoking signs	Y	N			
Vents clear	Y	N			
Tank Shell and Pipes					
Discoloration	Y	N			
Corrosion	Y	N			
Cracks	Y	N			

LOG OF TANK INTEGRITY INSPECTIONS

USACE Facility Location: _____

Tank	Date	Result (Pass/Fail)	Inspector Name / Signature

SPILL SAMPLE COLLECTION PROCEDURES

1. Several precautions must be observed when taking and handling liquid samples for analysis, as the character of the sample may be affected by a number of common conditions. These precautions include the following:

- a. The composition of the container.
- b. The cleanliness of the container.
- c. The manner in which the sample is taken.

2. In taking samples, the following procedures will be observed:

a. Glass containers of one-quart size will be used. The closure cap interliner should be made of aluminum foil or teflon, since it may come in contact with the sample. Previously unused containers are preferred. Glass containers must be used, because plastic containers (with the exception of teflon) have been known to absorb organic materials from water. In other cases, compounds have been dissolved from plastic containers.

b. Because pollution conditions change rapidly, samples should be taken promptly and regularly, with the time sequences and locations noted. Obtain a sufficient amount of pollutant for analysis.

c. Label the bottles in accordance with page I-13 of this appendix. Attach the labels to the bottle, and write the sample number on the bottle with a marker. Secure the sample in a location with a controlled environment, and with access limited only to project or District employees.

d. Advise Operations Division or Emergency Management Branch that the samples are ready for delivery to a testing laboratory.

e. If returned, each sample container will be completely cleaned, rinsed, and dried. Consult Planning Division for the proper cleaner to use.

SAMPLE COLLECTION BOTTLE LABEL

HAZARDOUS MATERIALS SPILL LABEL
SAMPLE BOTTLE NO: 1
MATERIAL: Diesel fuel
SOURCE: Ruptured barge
LOCATION (RIVER & RIVER MILE): Columbia River, River Mile 292
COLLECTED BY: Jane Doe
WITNESSED BY: Walter Mitty
DATE AND TIME: 7 July 1991, 0925
PRESERVATIVE: None
COMMENTS : Barge was hit by another barge and sunk as a result.
A copy of this label should be given to the witness. NPW Form 323 August 1984

APPENDIX J: SPCC CONTINGENCY PLAN INFORMATION

CONTINGENCY PLAN INFORMATION - SPECIFIC ACTIONS BY LOCATION

Miscellaneous Spills – Any Location

1. Should an oil spill occur which threatens to enter the river or threaten the environment, the Little Goose Project Manager or his designee and the SPCC Coordinator must be notified immediately.
2. Any oil spill, regardless of magnitude, must be dealt with expediently in order to prevent the spill from reaching the water ways and to prevent damage to project facilities and personnel.
3. The spill may be contained by the use of boom and drain plugs over the deck/floor drains.
4. Once contained, the spill must be cleaned up and either disposed of or the oil transferred to holding tanks for purification.
5. Cleanup may be accomplished by pumping, vacuuming, or soaking up with absorbent pads. Oil residue may be removed with the use of the bilge cleaner available by spraying or broadcasting.
6. Contaminated clothing, pads, and other material must be disposed of in proper containers.
7. The Little Goose Technical staff must be notified in order to file the appropriate forms.

Turbine Hub

In the event of a turbine hub leak or failure the following items need to be followed:

1. Immediate notification to the Project ECC (Incident Commander) or his/her designee.
2. See page A-16 of Spill Action Plan for Spill notification.
3. Project ECC will notify the properly trained personnel and / or contractor depending on the size of the spill to take the necessary clean-up actions.
4. Spill equipment is located every few units on the tailrace for use in this instance. See the SPCC plan for this facility for a more comprehensive list.
5. The affected unit will be taken off line and isolated so that no additional spillage occurs.
6. Project ECC has the necessary authority to notify various State and Federal agencies for needed notification or their additional help, depending on the severity of the spill.
7. Project ECC can allocate all of the available equipment on the project necessary to prevent the spill from spreading.
8. If deemed necessary by the Project ECC an operations center will be set-up for the Incident Command system.

If after a turbine hub spill, improvements to this plan need to be made, the Project ECC will review and make the necessary changes.

Navigation Lock and Outside Powerhouse Contingency Plan

In the event of oil spilling, at the navigation lock or spillway cranes, the following procedures need to be followed:

1. Immediate notification to the Project ECC (Incident Commander) or his/her designee.
2. See page A-16 of Spill Action Plan for Spill notification.
3. Project ECC will notify the properly trained personnel and / or contractor depending on the size of the spill to take the necessary clean-up actions.
4. Bags of 20"x16" mat pads are located near the Miter Gate rooms. See Appendix F for a more comprehensive list of spill clean-up materials.
5. The affected area will be boomed off to prevent spread of the spill.
6. If spill is in the navigation lock itself, barge traffic will be stopped and the necessary booming and clean-up will proceed.
7. Project ECC has the necessary authority to notify various State and Federal agencies for needed notification or their additional help, depending on the severity of the spill.
8. Project ECC can allocate all of the available equipment on the project necessary to prevent the spill from spreading.
9. If deemed necessary by the Project ECC an operations center will be set-up for the Incident Command system.

If after a spill at the navigation lock or from the spillway crane, improvements to this plan need to be made, the Project ECC will review and make the necessary changes.

Powerhouse Turbines

1. Should an oil spill occur in the powerhouse structure or turbine pits, every effort to contain the spill before it enters the powerhouse drainage system the turbine pits (if not already in the pits) will be made. The oil spill kits and warehouse cache contain booms, plug rugs, absorbent, and rags that can be used for this purpose.
2. Should the spill enter the drainage system, the sumps must be monitored and, if necessary, operated manually to prevent pumping any oil into the river. Air-operated vacuums can be used to vacuum up oil from the water and floors.

Should oil enter the turbine pits, the top plate pump operation must be monitored and the air pump turned to lag or off. The air pumps discharge directly into the turbine top plate pump discharge piping system, which routes to the sump. The submersible electric top plate pumps will not pump oil at the same head as they do with water, so the depth of the oil in the headcover must be monitored closely and oil removed as soon as possible. Caution must also be exercised as to starting or stopping a unit with oil in the turbine headcover as the oil will be drawn through the packing and into the river at generator speeds of “no load” or “low loading”.

4. Once the spill is contained, the sump must be checked for oil. Oil may be skimmed from the water surface by vacuuming or pumping into 55-gallon drums. The sump will be monitored for a few days after the spill to take care of any residual oil, which may leak through the system.
5. All spill containment and clean up materials will be disposed of in approved containers. Bagging up materials will prevent garbage containers from leaking. Drums of waste oil will be disposed of in the waste oil tank.
6. Contact the SPCC Coordinator or Operations Manager for further direction.
7. Assist in filing appropriate reports.

If after a spill at the powerhouse, improvements to this plan need to be made, the Project ECC will review and make the necessary changes.

Intake Gate Slots

The headgate system of the powerhouse system uses hydraulic cylinders for lowering and raising the headgates. These cylinders (and associated piping) are located in the downstream intake slots of each unit attached between the headgate and the headgate support beam. All of this equipment is located below pool water elevation and is therefore normally submerged. It is possible, although highly unlikely, that this hydraulic system could develop a leak in one of the intake slots. In the event of such an oil spill in the intake gate slots (usually indicated by the lowering of the storage tank levels) the following steps will be taken:

1. Determine which head gate system is leaking by visually inspecting the slots. This requires the crane operator and rigger to raise the cover slabs. It is best to inspect all slots and not stop when the first leak is found.
2. When a defective hydraulic system is determined, latch the head gate(s) in the up position, if possible (**clearance required**), or shut the unit down and lower head gate(s).
3. Close the Down Stream Migrant (DSM) orifice valve.
4. Mobilize pump, skimmer attachment, hoses, waste oil barrels, and oil absorbent pads.
5. Lower the pump with skimmer attached into the oil so that the skimmer is just below the surface - start pump and throttle air so that pump cycles once every 2-3 seconds (slower if warranted).
6. Discharge pumped oil into waste barrels and tag: USED OIL
7. Use absorbent pads to remove last film of oil from water surface - dispose of pads in properly marked container. (NON-HAZARDOUS WASTE)
8. Repair and leak test. Repeat Steps 2-7 if leak reoccurs.
9. Return unit/system to service.
10. Clean and store equipment.
11. Dispose of waste oil in waste oil tank.
12. Dispose of oil pads.
13. File appropriate reports.

If after a spill at the intake gate slots, improvements to this plan need to be made, the Project ECC will review and make the necessary changes.

Transformer

1. Should a transformer begin leaking oil, notify the control room immediately. **Do not attempt to stop the leak or contain the spill until the transformer is de-energized.**
2. When the transformer is de-energized and you are notified by the proper authority, place floor drain stop pads over the drains located in the transformer containment to stop as much oil as possible from entering the drainage system.
3. If possible, stop or restrict the oil flow from the transformer if it can be reached safely.
4. When the electrical crew foreman or his designate arrives on scene and has a safe clearance in place, assist as needed in the oil leak repair and salvage operation. The electrical crew foreman or his designate will assume control of the situation.
5. When released from the spill scene by the proper authority, practice good hygiene and wash oil from skin and clothing.
6. Report to your supervisor and assist in the filing of the forms required.

If after a spill in the transformer area, improvements to this plan need to be made, the Project ECC will review and make the necessary changes.

Other Oil Spills

1. Implement notification list found in this SPCC plan.
2. Contain oil spill using curtain boom to prevent spreading. When possible, completely surround source.
3. If oil was spilled on land, use absorbent boom and pads to contain material and prevent it from entering water. Cover nearby drains and dike as necessary to contain oil.
4. If spreading is occurring too rapidly or other conditions prevent the containment of the
5. Oil, employ the boom to deflect the oil from critical or sensitive areas.
6. Once the spill has been contained use absorbent material to collect oil. Absorbent pads may be placed within the boomed area, retrieved, wrung out, and placed back in the boomed area.
7. During cleanup, recovered oil may be stored in 55 gallon drums with lids. Following cleanup, oil must be disposed of in accordance with current EPA requirements.

Notification Flow Chart

NOTE: When making notifications, include the following information (if known):

- Spill location
- Material spilled - type and quantity
- Magnitude of spill (size of area affected)
- Response actions taken
- Status of personnel - are there injuries or contaminated individuals?
- Your name and the number you are calling from

1. Little Goose Control Room

(509) 399-2233

The control room operator will initiate the Spill Notification Process found in this SPCC Plan.

The Little Goose Project SPCC Plan developed by the US Army Corps of Engineers is recognized as the primary plan for the containment and cleanup of spills.

SPCC CONTINGENCY PLAN CHECKLIST

40 CFR Part 109—Criteria for State, Local and Regional Oil Removal Contingency Plans If a facility makes an impracticability determination for secondary containment in accordance with §112.7(d), it is required to provide an oil spill contingency plan following 40 CFR part 109.

109.5—Development and implementation criteria for State, local and regional oil removal contingency plans*	Yes	No
(a) Definition of the authorities, responsibilities and duties of all persons, organizations or agencies which are to be involved in planning or directing oil removal operations.		
(b) Establishment of notification procedures for the purpose of early detection and timely notification of an oil discharge including:		
(1) The identification of critical water use areas to facilitate the reporting of and response to oil discharges.		
(2) A current list of names, telephone numbers and addresses of the responsible persons (with alternates) and organizations to be notified when an oil discharge is discovered.		
(3) Provisions for access to a reliable communications system for timely notification of an oil discharge, and the capability of interconnection with the communications systems established under related oil removal contingency plans, particularly State and National plans (e.g., NCP).		
(4) An established, prearranged procedure for requesting assistance during a major disaster or when the situation exceeds the response capability of the State, local or regional authority.		
(c) Provisions to assure that full resource capability is known and can be committed during an oil discharge situation including:		
(1) The identification and inventory of applicable equipment, materials and supplies which are available locally and regionally.		
(2) An estimate of the equipment, materials and supplies which would be required to remove the maximum oil discharge to be anticipated.		
(3) Development of agreements and arrangements in advance of an oil discharge for the acquisition of equipment, materials and supplies to be used in responding to such a discharge.		
(d) Provisions for well defined and specific actions to be taken after discovery and notification of an oil discharge including:		
(1) Specification of an oil discharge response operating team consisting of trained, prepared and available operating personnel.		
(2) Predesignation of a properly qualified oil discharge response coordinator who is charged with the responsibility and delegated commensurate authority for directing and coordinating response operations and who knows how to request assistance from Federal authorities operating under existing national and regional contingency plans.		
(3) A preplanned location for an oil discharge response operations center and a reliable communications system for directing the coordinated overall response operations.		
(4) Provisions for varying degrees of response effort depending on the severity of the oil discharge.		
(5) Specification of the order of priority in which the various water uses are to be protected where more than one water use may be adversely affected as a result of an oil discharge and where response operations may not be adequate to protect all uses.		
(e) Specific and well defined procedures to facilitate recovery of damages and enforcement measures as provided for by State and local statutes and ordinances.		

APPENDIX K: SPCC PLAN EVALUATION AND CHECKLISTS

SPCC INSPECTION AND TESTING CHECKLIST

Records of inspections and tests required by 40 CFR part 112 signed by the appropriate supervisor or inspector must be kept with the SPCC Plan for a period of three years. Records of inspections and tests conducted under usual and customary business practices will suffice. Documentation of the following inspections and tests should be kept with the SPCC Plan.

Inspection or Test	Documentation		Not Applicable
	Present	Not Present	
112.7 - General SPCC Requirements			
(d) Integrity testing is conducted for bulk storage containers with no secondary containment system and for which an impracticability determination has been made			
(d) Integrity and leak testing of valves and piping associated with bulk storage containers with no secondary containment system and for which an impracticability determination has been made			
(i) Evaluate field-constructed aboveground containers for potential for brittle fracture or other catastrophic failure when the container undergoes a repair, alteration, reconstruction or change in service			
112.8/112.12 - Onshore facilities (excluding Production)			
(b)(2) Storm water released from facility drainage directly to a watercourse is inspected and records of drainage are kept			
(c)(3)(iv) Rainwater released directly from diked containment areas to a storm drain or open watercourse is inspected and records of drainage are kept			
(c)(4) Regular leak testing of completely buried metallic storage tanks			
(c)(6) Aboveground containers, supports and foundations tested for integrity on a regular schedule			
(c)(6) Outside of containers frequently inspected for deterioration, discharges or Accumulations of oil inside diked areas			
(c)(8)(v) Liquid level sensing devices regularly tested to ensure proper operation			
(c)(9) Effluent treatment facilities are observed frequently enough to detect possible system upsets that could cause a discharge as described in §112.1(b)			
(d)(1) When buried piping is exposed, it is carefully inspected for deterioration and corrosion damage is corrected			

(d)(4) Aboveground valves, piping and appurtenances are regularly inspected and the general condition of flange joints, expansion joints, valve glands and bodies, catch pans, pipeline supports, locking of valves, and metal surfaces are assessed			
(d)(4) Integrity and leak testing of buried piping is conducted at time of installation, modification, construction, relocation or replacement			
Comments:			

APPENDIX L: PERSONAL TRAINING LOGS AND FORMS

PERSONNEL TRAINING LOG

[illegible]

PERSONNEL TRAINING FORM

Name:	
Facility Name:	
TYPE OF TRAINING: CIRCLE ALL THAT APPLY	
Pollution Control Laws, Rules Regulations	Spill Containment
Inspection of Petroleum Storage Components	Fast Water Spill Control
Tank Loading and Unloading Procedures	Petroleum Transfer Operations
Incident Command	Haz Wopper

I certify that I have been trained in the items indicated above and have read and understand the SPCC plan prepared for this facility:

Employee Signature:		Date:	
SPCC Trainer:		Date:	

APPENDIX M: RESPONSE TEAM

INSTALLATION RESPONSE TEAM ORGANIZATION

The Installation Response Team as described in this section consists of primary and alternate assignments of Army personnel to particular jobs and functions in the event of a discharge of oil or hazardous polluting discharge at Little Goose Dam. The team is activated by the Temporary On-Scene Coordinator (TOSC), who has overall control and authority over the Team's actions and activities.

Note that the Team is structured for large spill situations and it is surmised that in minor spill events a few individuals would perform the functions of various team positions.

Due to the nature of the project, the response team organization has been designed to accommodate two differing scenarios. The first scenario involves a spill inside or immediately adjacent to the dam and powerhouse. The second scenario is for a spill occurring on or adjacent to the reservoir, campgrounds, or roads passing through project lands

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INSTALLATION RESPONSE TEAM FOR LITTLE GOOSE DAM

Team Member	Dam and Powerhouse Primary/Alternate	Reservoir Primary/Alternate
Communications Coordinator	Walla Walla District Public Affairs Office	Walla Walla District Public Affairs Office
TOSC	Project Manager/ ERGO Coordinator	Project Manager/ ERGO Coordinator
Government Liaison Coordinator	Walla Walla District Emergency Management Branch	Walla Walla District Emergency Management Branch
Recorder	ERGO Coordinator/ Chief, Operations & Maintenance	ERGO Coordinator/ Chief, Operations & Maintenance
Operations Supervisor	Chief, Operations & Maintenance/ Shift Operator	Resource Manager/ Park Ranger
Logistic Supervisor	Chief, Operations & Maintenance/ Shift Operator	Resource Manager/ Park Ranger
Telecommunications Coordinator	Chief, Operations & Maintenance/ Maintenance Clerk	Resource Manager/ Park Ranger
Cleanup Resources Coordinator	Chief, Operations & Maintenance/ Shift Operator	Resource Manager/ Park Ranger

Team Member	Dam and Powerhouse Primary/Alternate	Reservoir Primary/Alternate
Area Manager of Operations	Chief, Operations & Maintenance/ Shift Operator	Resource Manager/ Park Ranger
Area Foreman	Mechanical Foreman/ Mechanic Work Leader	Maintenance Foreman/ Heavy Equipment Mobile Mechanic
Contracting Officer	Project Manager/ Chief, Operations & Maintenance	Project Manager/ Resource Manager
Accounting Officer	Administrative Officer/ Maintenance Clerk	Administrative Officer/ Maintenance Clerk
Administration Officer	Administrative Officer/ Maintenance Clerk	Administrative Officer/ Maintenance Clerk
Special Services Officer	As designated by TOSC	As designated by TOSC

DUTIES AND RESPONSIBILITIES

Communications Coordinator

- Prepare media releases including information on the type and quantity of spilled material, operations being undertaken to mitigate the effects of the spill, and specialties of any consultants that may have been called in to assist the TOSC/OSC.
- Receive all press telephone inquiries and other contacts not directly dealing with spill operations.
- Provide as necessary media briefings on scene and make arrangements for media tours of spill area.

TOSC

- Evaluate on-scene situation and assess magnitude of spill.
- Activate Installation Response Team calling in required personnel to fill response positions.
- Brief response team members on priority of cleanup operations.
- Officiate over daily debriefings of response team members and strategy meetings.
- Maintain communications with Walla Walla District Operations Division and assure that disposition of recovered pollutants is in accordance with applicable regulations.
- Assure that a recorder maintains an accurate record of spill and cleanup events.
- Direct the preparation of spill reports and scenarios, placing emphasis on corrective action needed to reduce or eliminate the possibility of a reoccurrence.

Government Liaison Coordinator

- Assure all applicable Federal, State, and local agencies have been notified of the spill situation.
- Determine specific interests of various agencies and relate this information to the TOSC.
- Work closely with Communications Coordinator in determining information to be released to interested parties.
- Conduct tours of site for regulatory agency representatives.

Recorder

- Use tape recorder, cameras, drawings and other necessary tools in order to keep an accurate chronological record of the spill and subsequent clean up operations. Items to be recorded include areas affected by the spill, equipment used to contain and remove the spill, manpower utilization, and disposition of recovered pollutants.
- Assist in sampling and obtaining chemical analyses of pollutants and surrounding waters.
- Prepare final chronological report of clean up activities, including total costs for manpower and equipment.

Operations Supervisor

- Recommend to the TOSC areas requiring maximum emergency effort and specific procedures for spill containment and cleanup.
- Determine spill size and direction, and predict movement of spill.
- Assist TOSC in developing clean up plans, including equipment and manpower requirements.

- Provide manpower and equipment data to the recorder.

Logistic Supervisor

- Provide the TOSC with requested equipment, supplies, labor, skills, and services adequate for emergency and support activities.
- Ensure outside resources are contracted and accurate records maintained of all business transactions.

Telecommunications Coordinator

- Provide and maintain an adequate radio and telephone communication system.

Cleanup Resources Coordinator

- Provide Operations Supervisor with equipment, supplies, and manpower to accomplish cleanup operations.
- Arrange through Contracting Officer purchase of supplies/services as requested by Operations Supervisor.
- Arrange for cleaning and returning of equipment upon conclusion of its use.

Area Manager of Operations

- In immediate charge of all equipment and manpower engaged in landside cleanup operations.
- Direct and coordinate all water spill containment and clean up operations.
- Coordinate activities of equipment operators and laborers through foremen. - Make recommendations as to clean up methodologies and utilization of resources to Operations Supervisor.
- Supervise all clean up and disposal activities in designated area.
- Ensure that the required health and safety equipment is obtained.

Area Foremen

- Implement immediate containment and clean up procedures as directed by Area Manager.
- Assist Area manager in developing containment, cleanup and disposal operation plans.
- Request through Area Manager necessary equipment and manpower.
- Provide for safe operations and ensure that health and safety standards are met.

Contracting Officer

- Review, analyze, and approve all contracts giving consideration to their legal and financial terms as well as equipment conditions and operation policies.
- Arrange for purchase of supplies/services as requested by Operations Supervisor.
- Ensure that contract conditions are met on behalf of both parties.

Accounting Officer

- Keep accounts and records to show cost of all clean up work.
- Analyze contractor costs.
- Establish necessary controls to validate materials, equipment, special services, etc., chargeable to the cleanup.
- Receive, audit and pay invoices.

Special Services Officer

- Establish First Aid Stations as needed. - Act as safety advisor to ensure proper work

practices and conditions. Advise on personnel protective and safety equipment, arrange for procurement and distribution. Periodically make field inspections.

- Arrange for security and traffic control when needed.
- Arrange for disposal of waste materials.
- Report and record any unsuspected incidents.

Administration Officer

- Ensure that support staff maintains an accurate account of their time expenditures.
- Provide miscellaneous support/administrative activities as needed by the support staff.

RESPONSE ACTIONS SUMMARY

First Responder (First Person On Scene)

1. Recognizes incident.
2. Moves to safe distance.
3. Assesses situation.
4. Identifies hazardous substance, if possible, and severity of incident.
5. Notifies duty operator and/or supervisor.
6. Has control room initiate emergency signal, *if necessary*.
7. Renders first aid and/or contains spill *if possible and if qualified*.
8. Denies entry until relieved by TOSC.

Temporary On-Scene Coordinator (TOSC) or On-Scene Coordinator (OSC)

1. Verifies and assesses hazardous material spill, contacts Project Manager if spill is uncontrolled or if released to environment.
2. Determines the threat to public health or welfare.
3. Determines if evacuation of project area(s) is appropriate.
4. Initiates notifications per Appendix E.
5. For small spills within project capability:
 - * Coordinates response personnel.
 - * Communicates status of cleanup progress and material needs to Project Manager.
 - * Establishes safety zones for cleanup.
 - * Monitors cleanup.
0. For large spills requiring external response; coordinates response personnel until relieved.
 1. Directs materials sampling and photography as required by Appendix P of NPWOM 500-1-1 (found in Appendix A of this plan).
 2. Completes Hazardous Materials Spill Report, Appendix G.

Project Manager (or designated alternate)

1. Initiates request for external response, if necessary.
2. Coordinates communications.
3. Notifies Walla Walla District Project Operations.
4. Ensures completion and submission of necessary reporting forms.
5. Directs evaluation and critique to seek ways to prevent reoccurrence.

APPENDIX N: SECONDARY CONTAINMENT CALCULATIONS

Oil Storage Room, El. 494

The Oil Storage Room is approximately 32 feet in length and approximately 26 feet wide. The lowest elevation that oil could escape is through the doorway, which is at the top of the stairs into the room which is approximately 4 feet above the floor. The containment is required to hold the capacity of the largest single container. The containment capacity of the room is calculated as follows:

$$32\text{ ft} \times 26\text{ ft} \times 4\text{ ft} = 3,328\text{ ft}^3 = 24,895\text{ gal}$$

The largest tank in the Oil Storage Room is 20,000 gallons. The containment is sufficient. This room can hold approximately 124 percent of the capacity of the largest container.

Emergency Diesel AST, El. 558

The containment around the aboveground storage tank is 21 feet in length, 9 feet in width, and 3 feet in height. The tank and containment is under a covered shelter and is not exposed to precipitation. The containment is required to hold the capacity of the tank. Containment calculations are as follows:

$$21\text{ ft} \times 9\text{ ft} \times 3\text{ ft} = 567\text{ ft}^3 = 4,241\text{ gal}$$

The capacity of the emergency diesel AST is 3,000 gallons. The containment is sufficient and can hold approximately 141 percent of the capacity of the AST.

Gravity Oil AST, El. 618

The Gravity Oil AST is contained inside in a room approximately 9 feet in length and 8 feet in width. The lowest elevation that oil could escape is through the doorway, which is approximately 1 foot above the floor of the room. The containment capacity of the room is calculated as follows:

$$9\text{ ft} \times 8\text{ ft} \times 1\text{ ft} = 72\text{ ft}^3 = 539\text{ gal}$$

The capacity of the gravity oil AST is 500 gallons. The containment is sufficient. This room can hold approximately 108 percent of the capacity of the AST.

Gasoline AST, El. 644

The containment around the gasoline aboveground storage tank is 15.5 feet in length, 9 feet in width, and 3 feet in height. The tank and containment is under a covered shelter and is not exposed to precipitation. The containment is required to hold the capacity of the tank. Containment calculations are as follows:

$$15.5\text{ ft} \times 9\text{ ft} \times 3\text{ ft} = 418.5\text{ ft}^3 = 3130\text{ gal}$$

The capacity of the gasoline AST is 1,000 gallons. The containment is sufficient for the AST and can hold approximately 313 percent of the capacity of the AST.

Mobile Diesel Tank, Various Locations

The capacity of the mobile diesel tank is 100 gallons. The containment around the gasoline aboveground storage tank is 4.5 feet in length, 4.5 feet in width, and 10 inches in height. The containment is uncovered and exposed to precipitation. Thus, the containment is required to hold the capacity of the tank and a sufficient amount of freeboard to account for accumulated precipitation.

The standard chosen to determine adequate containment capacity for accumulated precipitation is the 25-year, 24-hour rain event. Precipitation maps for Washington State show a maximum 25-year, 24-hour rain event value of 2.5 inches for the border of Washington State and Oregon State or 50.6 gallons for the containment.

Existing containment calculations:

$$4.5 \text{ ft} \times 4.5 \text{ ft} \times 1 \text{ ft} = 20.25 \text{ ft}^3 = 151.5 \text{ gal}$$

Precipitation requirement calculations:

$$4.5 \text{ ft} \times 4.5 \text{ ft} \times 2.5 \text{ in} \times \frac{1 \text{ ft}}{12 \text{ in}} = 4.22 \text{ ft}^3 = 31.6 \text{ gal}$$

Containment requirement calculations:

$$100 \text{ gal} + 31.6 \text{ gal} = 131.6 \text{ gal}$$

The containment is sufficient for the mobile diesel tank and can hold approximately 115 percent of the required containment capacity of the tank.